a trapped charge; and

a level of protective material fabricated over the array of non-volatile memory cells for blocking the light received by the CMOS [imager] image sensor so that the trapped charged is not erased from exposure to the light.

4. (Amended) The image sensor of claim 1 wherein the level of protective material is fabricated as part of the CMOS [imager] image sensor.

5. (Amended) The image sensor of claim 1 wherein the level of protective material is a layer of metal fabricated as an interconnect for electrically connecting the CMOS [imager] image sensor and other circuits on the substrate.

6. (Amended) The image sensor of claim 1 wherein the CMOS [imager] image sensor comprises an active pixel array.

7. (Amended) The image sensor of claim 1 wherein the CMOS [imager] image sensor comprises a passive pixel array.

8. (Amended) An image sensor [on an integrated circuit] comprising:

a single integrated circuit;

a CMOS imager in the single integrated circuit and for defining an image in response to received light;

a non-volatile memory unit in the single integrated circuit and for storing the image, wherein the non-volatile memory unit is fabricated adjacent to the CMOS imager; and

a level of protective material fabricated over the non-volatile memory unit for blocking the light received by the CMOS imager.

11. (Amended) The image sensor of claim 10 wherein the non-volatile memory unit stores program code information for controlling the microcontroller.

15. (Amended) An image sensor [on an integrated circuit] comprising:

a single integrated circuit;

a CMOS imager in the single integrated circuit and for defining an image in response to received light;

a microcontroller in the single integrated circuit and for controlling the CMOS imager;

a non-volatile memory unit in the single integrated circuit and fabricated adjacent to the CMOS imager for storing program code or data; and

a level of protective material fabricated over the non-volatile memory unit for blocking the light received by the CMOS imager.

16. (Amended) The image sensor of claim 15 wherein the non-volatile memory unit receives and stores the image.

19. (Amended) A digital camera [fabricated on a single integrated circuit] comprising:

a single integrated circuit;

a CMOS image sensor in the single integrated circuit and for defining an analog image signal photoelectrically converted in response to received light;

an analog to digital convertor in the single integrated circuit and for receiving and converting the analog image signal into a digital image signal;

a frame memory in the single integrated circuit and for recording the digital image signal;

a data compression/decompression unit in the single integrated circuit and for compressing the digital image signal provided by the frame memory;

a non-volatile memory unit in the single integrated circuit and for receiving the compressed digital image signal, wherein a layer of protective material is fabricated over the non-volatile memory unit for blocking the light received by the CMOS [imager] image sensor; and

a microcontroller in the single integrated circuit and for controlling the exchange of the digital image signal between the frame memory and the non-volatile memory unit.